

ST. MARYS FALLS CANAL, MICHIGAN

**STATISTICAL REPORT
OF
LAKE COMMERCE PASSING THROUGH
ST. MARYS FALLS CANAL
SAULT STE. MARIE, MICHIGAN**

**DURING
2011 NAVIGATION SEASON**

**PREPARED UNDER THE DIRECTION OF
UNITED STATES ARMY ENGINEER DISTRICT, DETROIT
SAULT STE. MARIE AREA OFFICE**



TRAFFIC STATEMENT St. Marys Falls Canal, Michigan

The 2011 commercial navigation season through the United States locks began on 25 March 2011 and ended 300 days later on 18 January 2012. On 23 March 2011, USCGC MOBILE BAY and USCGC MACKINAW passed through the Poe Lock for ice breaking operations. The first commercial vessel for the season was the M/V PAUL R TREGURTHA on 25 March 2011 up bound for Superior, WI. The last commercial vessel was the M/V SAGINAW which passed down bound through the Poe Lock on 18 January 2012.

Delays are defined as elapsed time a vessel spends waiting to proceed with a lockage. Twenty Three vessels were delayed by ice for a total of 13 hour and 23 minutes. Delays caused by interference by other vessels totaled 6 hours and 10 minutes. Debris in lock recess or lock chamber accounted for 1 hour and 53 minutes of delays. Lock hardware or equipment malfunction accounted for 3 hours and 30 minutes of delays. Maintaining of lock equipment accounted for 58 minutes of delays. Ice on lock or lock equipment accounted for 13 minutes of delays. Vessels detained by the U.S. Army Corps of Engineers or the USCG accounted for 1 hour and 48 minutes of delays.

The largest cargo recorded for a single passage in the 2011 season was 67,205 net tons of Coal by the M/V INDIANA HARBOR on 23 August 2011. The greatest total seasonal cargo transported by a single vessel was 2,867,103 net tons carried by the M/V EDWIN H GOTT. The smallest cargo for a single passage in 2011 was 19 net tons of I&S Pipe & Tube by the M/V FEDERAL MIRAMICHI on 17 July 2011.

Cargo flow was the greatest in the month of July with 8,968,987 net tons passing through the locks. A total of 4,040 cargo carriers passed through the locks during the 2011 season, a decrease of 382 from the 2010 season. An annual total of 74,993,393 net tons of freight were recorded. This was 466,257 net tons above the 2010 total. Total vessel passages decreased from 10,015 in 2010 to 7,215 in 2011. Freight increased by .63 percent and total cargo carrier passages decreased by 9 percent.

Comparing the movement of cargo in and out of Lake Superior, 12 commodities experienced decreases from 2010 ranging from 4.55% for Cement & Concrete to 100% for Electrical Machinery, Fab. Metal Products, and Vehicles & Parts. Commodities increasing in volume ranged from Limestone at 1.70% to I&S Primary Forms at 667.71%. The greatest single gain in cargo tonnage was 5,850,621 net tons of Iron Ore while the most significant decrease was 5,107,955 net tons of Coal.

Three single cargo records were broken during the shipping season. The M/V KAMINISTIQUEA set a record with a load of 31,443 net tons of Canola. The M/V CLS ASSINIBOINE set a record with a load of 32,447 net tons of Bentonite. The M/V ALGOMA NAVIGATOR set a record with a load of 27,778 net tons of Mill Scale.

The record total tonnage for one day was broken 21 October 2011 when 501,277 net tons of cargo passed through the Poe Lock surpassing the record set 26 April 1975 of 442, 764 net tons.

The periods of operation and total passages of all craft for each lock during the 2011 season are as follows:

Lock	Traffic Opening Day	Closing Day	Number of Days in operation	Total Passages
MacArthur	10 April 11	18 December 11	253	3,602
Poe	25 March 11	18 January 12	300	3,613
Davis *	N/A	N/A	0	0

* Used occasionally

The following tabulation shows the number of cargo vessel passages recorded for the past ten navigational seasons through the American canal:

Year	No. Passages	Year	No. Passages
2002	4,543	2007	4,730
2003	4,205	2008	4,245
2004	4,189	2009	3,098
2005	4,312	2010	4,422
2006	4,412	2011	4,040

The following is a comparative monthly statement of freight tonnage moved through the St. Marys Falls Canal for the past two seasons:

Month	2010 Net Tons	2011 Net Tons	Increase/Decrease
March	1,247,118	1,195,745	-51,373
April	7,075,675	6,720,783	-354,892
May	8,360,539	7,879,189	-481,350
June	8,134,045	7,945,718	-188,327
July	8,909,371	8,968,987	59,616
August	8,582,379	8,555,144	-27,235
September	8,049,370	8,525,211	475,841
October	7,587,430	7,598,471	11,041
November	7,427,129	7,394,996	-32,133
December	6,505,638	7,466,005	960,367
January	2,648,442	2,743,144	94,702
Total	74,527,136	74,993,393	466,257

Statistical Report of Lake Commerce
 Passing Through the Canal at Sault Ste. Marie, Michigan
 For the Season of 2011

Item	Westbound	Eastbound	Total Net Tons	Previous 3 Seasons Average
Animal Feed, Prep.	0	294,308	294,308	56,526
Asphalt, Tar & Pitch	0	52,619	52,619	50,596
Barley & Rye	0	18,509	18,509	132,523
Cement & Concrete	278,285	1,641	279,926	335,553
Clay & Refrac. Mat.	0	119,273	119,273	93,666
Coal Coke	154,893	92,570	247,463	241,289
Coal	1,620,741	11,340,111	12,960,852	18,886,655
Distillate Fuel Oil	76,166	17,116	93,282	115,571
Dredged Material	0	50	50	70,140
Electrical Machinery	0	0	0	10,268
Fab. Metal Products	0	0	0	247
Flaxseed	0	111,833	111,833	361,238
Gasoline	85,471	20,364	105,835	97,090
Grain Mill Products	0	0	0	15,762
I&S Bars & Shapes	58,320	0	58,320	61,254
I&S Pipe & Tube	125,778	0	125,778	53,597
I&S Plates & Sheets	405	284,618	285,023	364,342
I&S Primary Forms	21,158	0	21,158	919
Iron & Steel Scrap	29,706	145,669	175,375	57,296
Iron Ore	0	46,421,029	46,421,029	34,933,579
Limestone	4,513,184	1,300	4,514,484	3,959,052
Machinery (Not Elec)	28,877	0	28,877	34,635
Manganese Ore	0	0	0	9,242
Manufac. Prod. NEC	7,447	0	7,447	15
Oats	0	193,652	193,652	212,256
Oilseeds NEC	0	1,554,898	1,554,898	889,982
Paper & Paperboard	0	0	0	6,231
Petroleum Coke	0	27,631	27,631	22,985
Potassic Fert.	0	239,417	239,417	285,261
Primary I&S NEC	0	0	0	33
Pulp & Waste Paper	0	0	0	4,953
Residual Fuel Oil	0	0	0	2,412
Salt	657,485	8,157	665,642	542,982
Sand & Gravel	6,924	0	6,924	1,168
Slag	0	277,927	277,927	523,574
Sodium Hydroxide	0	0	0	5,499
Soybeans	0	1,489	1,489	18,971
Vegetables & Prod.	0	76,227	76,227	234,799
Vehicles & Parts	0	0	0	267
Waterway Improv. Mat	350	350	700	0
Wheat	55,151	5,972,294	6,027,445	6,091,990
Vessel Passages	3,824	3,391	7,215	8,299
Lockages	3,170	2,801	5,971	6,504
Total Passengers	46,026	13,760	59,786	98,622
Recreational Passengers	474	579	1,053	1,813
Freight (Net Tons)	7,720,341	67,273,052	74,993,393	68,784,416

Comparative Statistical Statement of Lake Commerce
Passing Through the Canal at Sault Ste. Marie, Michigan
For the Seasons of 2010 and 2011

Item	2010 Season	2011 Season	Increase / Decrease	Percent Increase Decrease
Vessel Passages	10,015	7,215	-2,800	-27.96%
Cargo Carriers	4,422	4,040	-382	-8.64%
Non-Cargo Carriers	5,593	3,316	-2,277	-40.71%
Lockages	7,336	5,971	-1,365	-18.61%
Total Passengers	122,753	59,786	-62,967	-51.30%
Recreational Passengers	2,605	1,053	-1,552	-59.58%
Animal Feed, Prep.	169,578	294,308	124,730	73.55%
Asphalt, Tar & Pitch	50,493	52,619	2,126	4.21%
Barley & Rye	145,449	18,509	-126,940	-87.27%
Cement & Concrete	293,284	279,926	-13,358	-4.55%
Clay & Refrac. Mat.	76,362	119,273	42,911	56.19%
Coal Coke	119,986	247,463	127,477	106.24%
Coal	18,068,807	12,960,852	-5,107,955	-28.27%
Distillate Fuel Oil	99,904	93,282	-6,622	-6.63%
Dredged Material	139,452	50	-139,402	-99.96%
Electrical Machinery	10,908	0	-10,908	-100.00%
Fab. Metal Products	740	0	-740	-100.00%
Flaxseed	342,439	111,833	-230,606	-67.34%
Gasoline	84,494	105,835	21,341	25.26%
I&S Bars & Shapes	106,458	58,320	-48,138	-45.22%
I&S Pipe & Tube	72,481	125,778	53,297	73.53%
I&S Plates & Sheets	361,229	285,023	-76,206	-21.10%
I&S Primary Forms	2,756	21,158	18,402	667.71%
Iron & Steel Scrap	66,523	175,375	108,852	163.63%
Iron Ore	40,570,408	46,421,029	5,850,621	14.42%
Limestone	4,438,902	4,514,484	75,582	1.70%
Machinery (Not Elec)	41,081	28,877	-12,204	-29.71%
Manufac. Prod. NEC	0	7,447	7,447	100.00%
Oats	148,170	193,652	45,482	30.70%
Oilseeds NEC	857,459	1,554,898	697,439	81.34%
Petroleum Coke	29,963	27,631	-2,332	-7.78%
Potassic Fert.	349,708	239,417	-110,291	-31.54%
Salt	501,278	665,642	164,364	32.79%
Sand & Gravel	3,505	6,924	3,419	97.55%
Slag	525,323	277,927	-247,396	-47.09%
Soybeans	9,919	1,489	-8,430	-84.99%
Vegetables & Prod.	154,999	76,227	-78,772	-50.82%
Vehicles & Parts	700	0	-700	-100.00%
Waterway Improv. Mat	0	700	700	100.00%
Wheat	6,684,378	6,027,445	-656,933	-9.83%
Total Freight	74,527,136	74,993,393	466,257	0.63%

Statistical Table of Freight Tonnage
 Passing Through the Canal by Lock and Direction at Sault Ste. Marie, Michigan
 for the Season of 2011

Month	MacArthur	Poe	Davis	West Bound	East Bound	Total
March	0	1,195,745	0	39,291	1,156,454	1,195,745
April	828,579	5,892,204	0	502,922	6,217,861	6,720,783
May	1,475,906	6,403,283	0	715,971	7,163,218	7,879,189
June	1,788,561	6,157,157	0	952,280	6,993,438	7,945,718
July	1,980,035	6,988,952	0	942,875	8,026,112	8,968,987
August	2,036,615	6,518,529	0	982,702	7,572,442	8,555,144
September	1,955,097	6,570,114	0	1,031,528	7,493,683	8,525,211
October	1,859,458	5,739,013	0	1,004,789	6,593,682	7,598,471
November	1,530,565	5,864,431	0	812,024	6,582,972	7,394,996
December	896,285	6,569,720	0	614,358	6,851,647	7,466,005
January	0	2,743,144	0	121,601	2,621,543	2,743,144
Totals	14,351,101	60,642,292	0	7720341	67273052	74,993,393

Statistical Table of Freight Tonnage and Passages
 Passing Through the Canal by Lock and Direction at Sault Ste. Marie, Michigan
 for the Season of 2011

Net Tonnage					Passages			
Vessel Flag	MacArthur Lock	Poe Lock	Davis Lock	Total Net Tons	MacArthur Lock	Poe Lock	Davis Lock	Total Passages
American	3,873,041	51,810,903	0	55,683,944	1,839	2,571	0	4,410
Canadian	9,872,365	7,178,408	0	17,050,773	950	710	0	1,660
Foreign	605,695	1,652,981	0	2,258,676	115	135	0	250
Government	0	0	0	0	698	197	0	895
All Other	0	0	0	0	0	0	0	0
Totals	14,351,101	60,642,292	0	74,993,393	3,602	3,613	0	7,215

Table of Maximum Records of Freight Tonnage for One Day
 Passing Through the Canal by Lock at Sault Ste. Marie, Michigan
 for the Season of 2011

Lock	Day	Tonnage	Cargo Passages	Average Lockage Time	
				Hour	Minute
MacArthur	6/16/2011	175,019	8	0	41
Poe	10/21/2011	501,277	13	1	4
All Locks	10/21/2011	637,293	25	1	3

Freight between Lake Superior and each of the other Lakes and Overseas
Passing Through the Canal at Sault Ste. Marie, Michigan
for the Season of 2011

Vessel Flag	PORTS		EASTBOUND FROM LAKE SUPERIOR								
	From	To	Lake Michigan	Lake Huron	Lake Erie	Lake Ontario	St. Marys River	St. Clair / Detroit Rivers	St. Lawrence River and Coastwise	Foreign	Total
American	American	American	20,822,025	38,612	13,317,695		1,700	15,610,229			49,790,261
	American	Canadian			261,215						261,215
	Canadian	American	69,337	18,000	9,016						96,353
Canadian	Canadian	Canadian		240,001	146,856	617,418	43,073	507,376	4,777,144		6,331,868
	Canadian	American	179,915	167,805	365,251			661,273			1,374,244
	American	Canadian			3,255,720	621,547		29,235	3,548,707		7,455,209
	American	Overseas									0
Other Foreign	Canadian	Canadian							504,644		504,644
	Canadian	American	20,481								20,481
	Canadian	Overseas								461,344	461,344
	American	American	18,075								18,075
	American	Canadian		8,818					529,291		538,109
	American	Overseas								421,249	421,249
Total Eastbound			21,109,833	473,236	17,355,753	1,238,965	44,773	16,808,113	9,359,786	882,593	67,273,052

Vessel Flag	PORTS		WESTBOUND TO LAKE SUPERIOR								
	From	To	Lake Michigan	Lake Huron	Lake Erie	Lake Ontario	St. Marys River	St. Clair / Detroit Rivers	St. Lawrence River and Coastwise	Foreign	Total
American	American	American	890,168	3,474,735	385,059		2,950	30,891			4,783,803
	American	Canadian	10,476	17,554	615,960			23,400			667,390
	Canadian	American		84,922							84,922
Canadian	Canadian	Canadian		229,961	18,109	21,138		88,044			357,252
	Canadian	American		354,960	14,597	189,969		53,952			613,478
	American	Canadian	11145	315,456	519,229			72,892			918,722
Other Foreign	Canadian	Canadian						21,158	152856		174,014
	Canadian	American							7,546		7,546
	American	Canadian						369			369
	American	American	6,724								6,724
	Overseas	American								9,795	9,795
	Overseas	Canadian								96,326	96,326
Total Westbound			918,513	4,477,588	1,552,954	211,107	2,950	290,706	160,402	106,121	7,720,341
Total Eastbound/Westbound			22,028,346	4,950,824	18,908,707	1,450,072	47,723	17,098,819	9,520,188	988,714	74,993,393

Comparative Statement of Deepest Monthly Drafts
Passing Through the Canal at Sault Ste. Marie, Michigan
for the Seasons of 2010 and 2011

Month	2010 Season			2011 Season			Increase / Decrease	
	Vessel Name	Draft		Vessel Name	Draft		Feet	Inches
		Feet	Inches		Feet	Inches		
March	AMERICAN MARINER	26	10	SAGINAW	26	0		-10
April	JOYCE VANEKEVORT	27	1	ALGOMA SPIRIT	26	3		-10
May	AMERICAN SPIRIT	27	0	SPRUCEGLEN	26	9		-3
June	ROGER BLOUGH	26	11	PHILIP R CLARKE	27	0		1
July	ST CLAIR	27	3	INDIANA HARBOR	27	4		1
August	EDGAR B SPEER	27	2	INDIANA HARBOR	27	4		2
September	EDGAR B SPEER	27	2	STEWART J CORT	27	3		1
October	OLYMPIC MELODY	27	7	JAMES R BARKER	27	0		-7
November	PHILIP R CLARKE	26	11	BIRCHGLEN	26	8		-3
December	EEMSBOURG	26	9	GREAT REPUBLIC	26	10		1
January	HERBERT C JACKSON	26	0	CSL ASSINIBOINE	26	6		6

Maximum All-Time Freight Records
for Each Month of Navigation

Month	Year	Number of Lockages	Number of Passages	Total Net Tons
February	1978	101	102	968,280
March	2006	109	122	1,744,715
April	1953	1,990	2,533	12,323,048
May	1953	2,524	3,378	18,071,240
June	1953	2,059	2,812	18,317,886
July	1953	2,938	4,199	18,660,360
August	1953	2,980	4,167	19,106,798
September	1952	2,768	3,455	17,537,072
October	1943	2,520	3,435	16,502,946
November	1952	2,296	2,789	13,604,714
December	1994	640	707	9,974,983
January	2004	252	253	3,827,480